

July 10, 2000

Environmental Water Account (EWA) Issues**POLICY ISSUES:**

1. The CALFED Framework Document states that EWA should not affect the allocations of the water contractors if EWA borrows Central Valley Project (CVP) or State Water Project (SWP) Storage. The principle that EWA operations should not harm the CVP should probably be extended to all aspects of EWA asset acquisition and all functions of the CVP including water, power, cost recovery, CVPIA mandates, etc. The recommendations following the issue descriptions were formulated assuming this principle is one of the guiding principles governing EWA implementation.
2. Does Reclamation or the Department of Water Resources have the authority to acquire nonproject water for the EWA? Would the water be acquired under CVP water rights, SWP water rights, or other water rights?
3. Since the EWA gaming exercise did not take into account Reclamation's CVPIA mandate to acquire incremental Level 4 refuge water supplies (Level 4 water), the CALFED framework document, as currently written, may preclude the ability to provide the refuges with full Level 4 supplies. Tools to obtain/convey water for the EWA include:
 - Shared use of Joint Point with CVP
 - Borrow water from CVP and SWP
 - Dedication of 500 cfs of the increase in State Water Project pumping capacity from 6,680 cfs to 7,180 cfs in the July through September time frame for EWA water
 - Export/Inflow Ratio Flexibility
 - Coordination of EWA pumping to capture environmental flows dedicated to the CVPIA Anadromous Fish Restoration Program (AFRP) and the CALFED Environmental Water Program (EWP)
 - Water purchases both North and South of the Delta
 - Source shifting of South of Delta demands

Because many of the tools to obtain/convey EWA water are the same as the tools to acquire/convey Level 4 water, CVPIA acquisitions will be seriously hampered if the priority of the EWA and CVPIA acquisitions are not equal.

Recommendation-- In order to preclude competition between the CVPIA and EWA water acquisition efforts as well as to accommodate such other programs as the Governor's Drought Water Bank, it is suggested that a bank of water assets be established using CVPIA, CALFED and perhaps other funds. This bank would develop assets based on the integrated needs of the EWA, EWP, AFRP, refuges and possibly the Drought Water Bank. Given that different hydrologic years will dictate different needs for both Level 4 supplies as well as EWA water, there are synergies associated with such a shared asset approach including the ability to trade assets back and forth based on environmental needs. If competition for assets develops in any year, some of the fishery agencies (i.e. U.S. Fish and Wildlife Service and California Department of

Fish and Game) responsible for managing the EWA assets are the same agencies with responsibility for managing the Federal and State refuges that receive Level 4 water supplies. Therefore, these agencies are the appropriate ones to make decisions on tradeoffs. A method for sharing water would have to be developed if the Drought Water Bank is included in the same bank of water assets.

OPERATIONAL ISSUES:

1. What is the priority of EWA water in San Luis Reservoir, or if it is backed up into Shasta or one of the other CVP reservoirs? How does this priority relate to other nonproject or rescheduled water in the reservoirs? Is EWA water stored in the State or Federal share of San Luis Reservoir?

Recommendation— Even if EWA is project water, it should have a lower priority than the water delivered to the contractors as ag, urban, or Level 2 refuge water. A case can be made that rescheduled water (and perhaps even Level 4 refuge water) should have a higher priority than EWA water. Rescheduled water is project water that CVP contractors have conserved and have planned into their next year's operations. They may have even been assessed charges to reschedule the water. In keeping with the principle that EWA operations should not harm the CVP, EWA operations should not limit or reduce this amount especially when the ability to forecast when and how much EWA water will be stored may not be easy. The priority for the level 4 water would depend upon how the acquisition is handled. If the Level 4 acquisition is part of the shared asset water bank, it may be reasonable for it to have equal priority. However, if the CVPIA Water Acquisition Program has acquired this water from another source, a higher priority may be in order. A dilemma that could occur, if EWA water has higher priority, is that acquired Level 4 water in storage in San Luis could be forced to be spilled with a subsequent delivery of EWA water to San Luis Reservoir.

2. If a water transfer has been scheduled by either a CVP/SWP contractor or third party using CVP/SWP capacity that the EWA decides to call upon, can the EWA preempt the transfer?

Recommendation-- If a transfer has already been scheduled, EWA should not be able to preempt the transfer. The transferring parties may have already invested time and money into the transfer, and it does not seem appropriate for the EWA to adversely impact these parties in this manner. Perhaps the establishment of EWA reserve transfer windows is a way to avoid this situation.

3. Is it appropriate to use project power to pump EWA water?

Recommendation— If EWA is purchased water North of the Delta, it is not appropriate to use project power to convey this water. EWA operators will need to arrange for power to convey EWA water. Even if EWA water is project water, EWA funding should be used to cover the costs of conveyance including power (at other than project power rates). There should be a separate account of power consumption and energy benefits (if any) and impacts associated with EWA operations to avoid impacts to the CVP power function. However, even with such a separate accounting method, it may be difficult to avoid impacts to CVP and SWP power over time. Most of the pumping will probably take place at Banks Pumping Plant; in the gaming exercise, there was a free exchange

of water to CVP/SWP in San Luis Reservoir to cover export reductions at either facility. It is unclear how the accounting system would work out under this type of operation.

4. Is there a contingency plan to assure that the CVP is not harmed if water is borrowed by the EWA?

Recommendation-- It is assumed that that the 200 TAF of initial assets constitutes that contingency plan. Guidelines need to be implemented restricting the EWA from borrowing above its assets, unless specifically approved.

5. How does the EWA fit into the re-negotiation of the COA? For example, before the EWA, the State received the entire benefit of pumping b(2) water with any available capacity at the SWP pumps. Now that benefit is shared with the EWA.
6. The EWA Gaming made a number of simplifying assumptions and had the benefit of knowledge of historical hydrology. A number of practical operational issues arise in attempting to implement the EWA:
 - a) Biological considerations make it difficult to obtain water through an EI relaxation.
 - b) In order to take advantage of many North of the Delta acquisitions, these will need to be backed up into one of the SWP/CVP reservoirs North of the Delta. Ramping issues at Oroville and Shasta temperature control operations make these acquisitions problematic because of the likelihood of either spilling EWA water, or impacting the CVP and/or SWP. Water was also backed into upstream reservoirs if there was an export reduction, whenever possible. Any available reservoir was used for this purpose without regard to COA issues.
 - c) There is a need to develop EWA forecasting criteria to operate for the EWA.
 - d) There is a need to reduce EWA assets to account for conveyance, carriage, evaporation and storage losses.
 - e) Exchanges of Federal/State storage in San Luis to facilitate EWA actions is problematic in terms of potentially impacting contractors' water allocations.
 - f) How will b(2) and EWA actions be accounted for? More generally, movement and storage of EWA assets as well as management of EWA water will be a difficult accounting exercise.
 - g) It will be difficult to integrate daily EWA decisions into CVP/SWP ops.
 - h) EWA water operations should not harm the projects due to any take of endangered species. If pumping results in a take situation when the EWA is exporting, it is assumed that the EWA would cease the operation.

CONTRACTUAL ISSUES:

1. Although much of the EWA water is obtained through operational means and/or purchase of project water from project contractors, some of it will be purchased water and will remain nonproject water unless a specific permanent water rights action is taken by the Secretary. However, in the past with similar acquisitions for Level 4 refuge water supplies, Reclamation/Interior did not enter into a Warren Act Contract for use of excess capacity. Should Warren Act Contracts be required for any nonproject EWA water?

Recommendation-- Presumably Reclamation and/or Interior probably do not want to initiate a Warren Contract with itself; therefore, the better approach might be to enter into

MOAs that specify charges and operational agreements similar to Warren Act type of contracts. Similar provisions/procedures could be applied to purchased water rights acquired by the Secretary and thereby declared (CVP) project water, as that term is defined in the CVPIA.

2. How will the repayment of the CVP be affected by EWA implementation?

Recommendation-- It will be necessary to establish careful tracking and accounting principles for EWA actions and expenditures to ensure no impact to the repayment of the project and/or losses of revenue to the Reclamation Fund.

3. In practice, how will the CVP contractors be assured that their allocations are not impacted by EWA operations?

Recommendation-- After implementing the EWA for a couple of years, staff will need to perform with and without EWA modeling studies to determine if the EWA did impact allocations. If an impact occurred, the adaptive management principle should govern how to change EWA operations to avoid such impacts.